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| OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850 | | | EXAMINER BASHORE, ALAIN L | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/647,225 | Applicant(s) KOYAMA, MINORU | |
| | Examiner Alain L. Bashore | Art Unit 1792 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9-10-07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) - | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-8 and 14 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for:

- a) the work being applied with the coating as claimed in claims 6-8; and,
- b) discharging liquid droplets as claimed in claim 5; and,
- c) the shape as claimed in newly added claim 14;

there does not reasonably provide enablement for any work being applied with any coating with any shape with any coating method other than the discharging of liquid droplets.

The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-8, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites a "film forming method", but the recitation of when the film is formed is not clearly claimed. Any amendment to remove the forming of a film would require the addition of a 35 USC 1st paragraph rejection regarding scope of enablement to claims that are broader than for a "film forming method".

Claims 1 and 14 also recites "a functional liquid receiver" which is vague and indefinite because the meets and bounds have not been defined as to when a receiver is "functional" and "non-functional". There is recited in claim 1 "a shape" which is vague and indefinite because the term "shape" also has no meets and bounds. The recitation "preliminary" is used for discharging, but no recitation (such as "sequentially") is used when the actual discharging occurs, thus making the claim confusing about when each discharging step occurs.

Claims 2-8 and 14 are also rejected for dependency on a rejected independent claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 1-3, 5, 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (JP-2001-180007) in view of Kawase et al further in view of , and further in view of Hiroshi et al (JP-2002-067346).

Suzuki appears to disclose a film forming method comprising preliminarily discharging liquid droplets from head, relatively moving the heads and a work to discharge the liquid droplets onto a surface of a work from the heads, and the preliminary discharge of the liquid droplets being carried out while the heads and/or work are moved, further being carried out during acceleration of the heads and/or work up to a predetermined speed (see abstract).

Suzuki does not disclose the work moving relative to the heads or the method of manufacturing a device that includes filter elements or pixel elements as including EL layers.

Kawase discloses a method of manufacturing a device, in which a film body being formed by discharging droplets onto the surface of a work from heads. The work can be moved relative the heads. Filter elements on a substrate is the work, further being EL light-emitting layers arranged, and a film body being a counter electrode film formed at a pre-determined place on the EL light-emitting layers (see fig. 8; col 2, lines 38-67).

It would have been obvious to one with ordinary skill in the art to include the work moving relative to the heads because Kawase teaches scanning as a technique to apply liquid droplets.

It would have been obvious to one with ordinary skill in the art to include the method of manufacturing a device that includes filter elements or pixel elements as including EL layers because Suzuki teaches advantages of reduction in throughput loss as desirable (see abstract) and Kawase teaches ink jet methodology for color filter manufacture.

Suzuki discloses what could be described broadly as a liquid droplet reception area, but Suzuki does not disclose the preliminary discharge of the liquid droplets being carried out in a liquid droplet reception area, a part of which is formed by the work.

Hiroshi et al discloses a liquid reception area, a part of which is formed by the work (described as "annulment regions; 70a-70c; see abstract).

It would have been obvious to one with ordinary skill in the art to include a liquid reception area, a part of which is formed by the work because Hiroshi teaches certain forming of multiple images requiring preliminary discharge of liquid droplets.

The term "functional" is taken to have the broadest possible meaning, "to result in a method being accomplished", which is shown in the prior art.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (JP-2001-180007) in view of Kawase et al further in view of Hiroshi et al (JP-2002-067346) as applied to claims above, and further in view of Fujii et al.

Suzuki does not disclose further comprising a vibrating step of, after liquid droplet discharge step, vibrating liquid within the heads to a extent that the liquid is not discharged from the heads.

Fujii et al discloses a vibrating step of, after liquid droplet discharge step, vibrating liquid within the heads to a extent that the liquid is not discharged from the heads (see abstract).

It would have been obvious to one with ordinary skill in the art to include a vibrating step of, after liquid droplet discharge step, vibrating liquid within the heads to a extent that the liquid is not discharged from the heads because Fujii et al teaches prevention of clogging as desired (see abstract).

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawase et al in view of Suzuki (JP-2001-180007) further in view of Hiroshi et al (JP-2002-067346) as applied to claim 5 above, and further in view of Sekiguchi.

Kawase et al and Suzuki (JP-2001-180007) do not disclose the work being a lens, and the film body being a transmissive coating for coating the lens.

Sekiguchi discloses the work being a lens, and the film body being a transmissive coating for coating the lens (col 20, lines 6-13).

It would have been obvious to one with ordinary skill in the art to include such because Sekiguchi teaches advantages of using a lens (col 20, lines 6-13).

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 4-8 of copending Application No. 11/588,240 in view of Hiroshi et al.

The newly added claim recitation would have been obvious to one with ordinary skill in the art to claim because of the reasons as set forth in the rejection above for the use of Hiroshi et al.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

10. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Since the manufacture of color filters are concerned with even and precise coatings, one with ordinary skill in the art would look to all precise coating methodologies, including the inkjet methods to enhance and control such an application.

Regarding newly added claim 14, the recitation does not preclude the "functional" receiver from being a work portion itself, and thus being "overlapping" as shown in Hiroshi et al.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Both Akimoto and Chu disclose a circumferential edge portion of a work overlapping a portion of a functional liquid receiver.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alain L. Bashore whose telephone number is 571-272-6739. The examiner can normally be reached on about 7:30 am to 5:00 pm (Mon. thru Thurs.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alain L. Bashore/
Primary Examiner
Art Unit 1792